

COMBINED THERMAL AND BLAST EFFECTS INTEGRATION OF A THERMAL RADIATION SIMULATOR INSIDE THE 2.4 M IN DIAMETER SHOCK TUBE AT C.E.G.

GRATIAS,S.

When a nuclear weapon is detonated in the atmosphere, the target are first loaded by a thermal flash and then by the blast wave.

In order to harden sensitive targets against possible synergistic effects, CEG intends to provide its Blast Simulator with a radiation Simulator (TRS).

In this scope, after having characterized and improved a TRS built by SAIC, CEG has integrated this simulator inside the 2.4 m diameter shock tube and examined the problems related to the actual timing of the thermal and blast effects.

After a brief review of the operation of both the shock tube and the improved TRS, this paper will describe the modification made to the shock tube for integrating the TRS and give the results of measurements made during combined tests.